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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

May 3, 1996

Ex Parte

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Federal-State Joint Board on Universal Service, CC Docket No. 96-45

Dear Mr. Caton:

In accordance with the Commission's rules governing ex parte presentations, please be advised that on May 2, 1996, Paul Cooper representing Southwestern Bell Telephone Company and Paul Pederson of the Joint Board staff discussed Southwestern Bell's position as filed in its comments in the docket.

Please associate this letter with the above-referenced proceeding. A duplicate copy is provided to confirm receipt. If you should have any questions, please contact me.

Sincerely,

Attachment

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List ABCDE

SWBT's COMMENTS

- NEED FOR RATIONAL PRICING
- NECESSARY CHANGES TO CCL/SLC
- UNIVERSAL SERVICE DEFINITION
- SCHOOLS, LIBRARIES, HEALTH CARE PROVIDERS
- AFFORDABLE SERVICE
- UNIVERSAL SERVICE AREA
- UNIVERSAL SERVICE COSTS
- EXPLICIT SUPPORT MECHANISMS
- UNIVERSAL SERVICE FUNDING
- OTHER ISSUES
    - Carrier of Last Resort Obligation
    - Resold Universal Service
    - Enhanced Service Provider Exemption
    - Capital Recovery

RATIONAL PRICING

- **REMOVE IMPLICIT SUPPORT FLOWS THROUGH REVENUE NEUTRAL RATE REBALANCING**
  - ELIMINATE CCL
  - DEAVERAGE SLC TO SMALLER GEOGRAPHIC MARKET AREAS
- **EXPLICIT FUNDING REQUIRED WHERE MARKET BASED PRICING OF UNIVERSAL SERVICE CONSIDERED UNAFFORDABLE**
  - HIGH COST SUPPORT
  - EXPANDED LIFELINE PROGRAM
- **FCC SHOULD FOCUS ON INTERSTATE**
  - STATES MANAGE INTRASTATE NEEDS

UNIVERSAL SERVICE

CORE SERVICES

- *VOICE GRADE ACCESS TO PUBLIC SWITCHED NETWORK*
- *TOUCH TONE*
- *SINGLE PARTY RESIDENCE & BUSINESS SERVICE*
- *ACCESS TO EMERGENCY SERVICES*
- *ACCESS TO BASIC OPERATOR SERVICES*
- *STANDARD WHITE PAGE DIRECTORY LISTING (1)*
- *ACCESS TO BASIC LOCAL DIRECTORY ASSISTANCE (1)*

ADDITIONS TO CORE SERVICES SHOULD DEPEND UPON CUSTOMER DEMAND, MARKETPLACE ACCEPTANCE & DEPLOYMENT COSTS

(1) ADDED BY SWBT

ADVANCED SERVICES FOR PUBLIC SCHOOLS, LIBRARIES AND RURAL HEALTH CARE PROVIDERS

- FEDERAL SUPPORT SHOULD COMPLEMENT EXISTING STATE INITIATIVES

- SEPARATE SUPPORT FUND

AFFORDABLE SERVICE

- AFFORDABILITY REFERS TO CUSTOMERS' ABILITY TO PAY
- UNIVERSAL SERVICE EXPENDITURES INCLUDE BOTH INTERSTATE & INTRASTATE CHARGES FROM CUSTOMER PERSPECTIVE
- UNIVERSAL SERVICE EXPENDITURES, EXPRESSED AS A PER CENT OF MEDIAN HOUSEHOLD INCOME, CAN PROVIDE MEASURE OF AFFORDABILITY
- SWBT SUPPORTS 1 % OF STATE MEDIAN HH INCOME AS AN AFFORDABLE AMOUNT TO SPEND ON UNIVERSAL SERVICE

COMPARABLE HOUSEHOLD EXPENDITURES

	% Median HH Income
Gasoline & Motor Oil	3%
Residential Energy	4%
Housekeeping Supplies	1.5%
Alcoholic Beverages	1%
Total Telecommunications	2-2.5%
Basic Local Exchange (1)	.7%

(1) Basic local exchange service, touchtone, SLC

-ILLUSTRATIVE-

AFFORDABILITY BENCHMARK

UNIVERSAL SERVICE HOUSEHOLD EXPENDITURES EQUAL TO 1% OF MEDIAN HOUSEHOLD INCOME

State	Median Household Income	Universal Service Household Expenditures	Interstate Benchmark	Intrastate Benchmark
Arkansas	$23,039	$19.20	$6.00	$13.20
Kansas	$29,770	$24.81	$6.00	$18.81
Missouri	$28,682	$23.90	$6.00	$17.90
Oklahoma	$26,260	$21.88	$6.00	$15.88
Texas	$28,727	$23.94	$6.00	$17.94

UNIVERSAL SERVICE AREA

- AREA OVER WHICH HIGH COSTS ARE DETERMINED
- AREA NO SMALLER THAN INCUMBENT LEC'S WIRE CENTER AND NO LARGER THAN BASIC LOCAL CALLING SCOPE
- RURAL TELCOS MAY RETAIN EXISTING STUDY AREAS

UNIVERSAL SERVICE COSTS

- EMBEDDED ACTUAL COSTS ARE APPROPRIATE FOR DETERMINING INITIAL FUNDING LEVELS

- SIMPLIFIED RULES COULD BE ADOPTED FOR NEW ELIGIBLE CARRIERS

- OPPOSE USE OF BENCHMARK COSTING MODEL (BCM)

  DOES NOT PROVIDE REASONABLE COMPARISON TO ACTUAL COST

EXPLICIT INTERSTATE HIGH COST SUPPORT FUND

- INTERSTATE LOOP COSTS ABOVE INTERSTATE AFFORDABILITY BENCHMARK ($6.00)
- EXISTING USF AND WEIGHTED DEM FOR RURAL INCUMBENT LECS
- EXISTING USF AND WEIGHTED DEM FOR NON-RURAL LECS FROZEN AND ELIMINATED AT END OF 4-YEAR TRANSITION PERIOD
- CCL & LTS ELIMINATED AT END OF 4-YEAR TRANSITION PERIOD. BULK BILLED DURING TRANSITION.

UNIVERSAL SERVICE FUNDING

- COMPETITIVE NEUTRAL FUNDING

- EXPLICIT SURCHARGE BASED UPON INTERSTATE RETAIL TELECOMMUNICATIONS REVENUES

- ALL CARRIERS PROVIDING INTERSTATE RETAIL TELECOMMUNICATION SERVICES RESPONSIBLE FOR COLLECTING SURCHARGE FROM THEIR END USERS

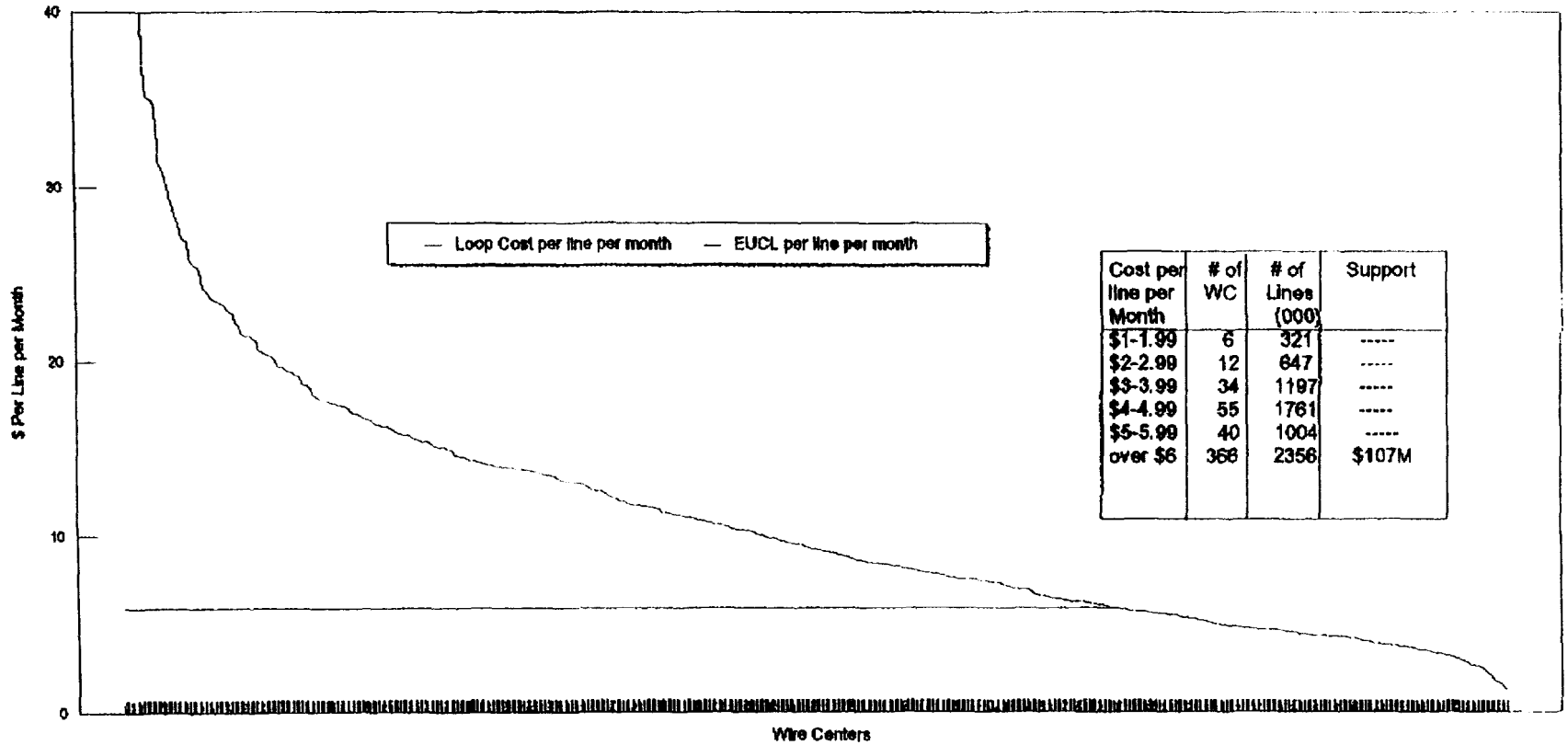
OTHER ISSUES

- **CARRIER OF LAST RESORT**
- **RESOLD UNIVERSAL SERVICE**
- **ENHANCED SERVICE PROVIDER EXEMPTION**
- **CAPITAL RECOVERY BY INCUMBENT LECS**

  RECOVER UNDER-DEPRECIATED INVESTMENT THROUGH TRANSITIONAL FUND

  FLEXIBLE DEPRECIATION POLICIES

SWBT - TEXAS



Cost per line per Month	# of WC	# of Lines (000)	Support
$1-1.99	6	321	-----
$2-2.99	12	647	-----
$3-3.99	34	1197	-----
$4-4.99	55	1761	-----
$5-5.99	40	1004	-----
over $6	368	2356	$107M

Interstate Loop Cost = 1993 Actual cost - $517M

EUCL = Lesser of $6.00 per line Affordability Benchmark or actual Interstate Loop Cost per line - $410M

SOUTHWESTERN BELL TELEPHONE COMPANY
4/30/96 DRAFT ENGINEERING ANALYSIS OF
BENCHMARK COST MODEL

I. USE OF THE BENCHMARK COST MODEL

The stated purpose of the Benchmark Cost Model (BCM) is to identify areas where cost of service can reasonably be expected to be so high as to require explicit high cost support. A review of the BCM indicates that it may, at best, provide a loose benchmark for measuring relative costs; it does not measure LEC specific costs. The Executive Summary of the joint submission states:

> "The BCM does not define the actual cost of any telephone company, nor the embedded cost that a company might experience..."

It would appear logical that, considering the critical nature of Universal Service Funding, the actual or embedded cost of the LEC should be of utmost relevance. The costs calculated in the BCM are based on a forward-looking methodology. It would be more realistic to determine relative cost of service on an embedded and LEC specific basis since it is not realistic or reasonable to determine LEC high cost areas by "wishing away" current and relevant costs that were created due to past obligations or that were based on commission prescribed depreciation lives. Nor is it realistic to assume that all LECs share the same cost structure.

If the Benchmark Cost Model were ever to be adopted in its current form (assuming that it is useful for anything), it would have to maintain a stated exception that would indicate that the Model could not be used as a pricing tool. As discussed in detail in this analysis, the assumptions and factors used in the BCM would neither represent nor calculate the incremental service cost for a LEC. This being the case, the Benchmark Cost Model would not be an appropriate pricing tool, nor would it be an appropriate test for cross subsidies.

II. COST FACTORS ADOPTED BY THE BENCHMARK COST MODEL

The two sets of cost factors that are used to determine the monthly cost associated with investment identified for each CBG are not an accurate representation of the incremental cost (and certainly not the embedded cost) for those CBGs. The first set of factors, based on ARMIS data, are representative of historical data according to BCM documentation. Although historical data can be extremely useful and is often used in estimating incremental costs, such data should not serve alone as the basis for that

determination. Incremental costs must take into account other estimates, especially when historical data might not logically fit future environments. In addition, to assume that the cost levels of all LECs fit the ARMIS level is an extremely loose assumption and will disadvantage individual LECs that, for whatever reason, have a different cost to serve.

The second set of cost factors, based on Hatfield / MCI, do not also serve the purpose of the Model. If the purpose is to determine areas requiring high cost support, and furthermore a quantitative figure with regards to what that support should be, then the Hatfield / MCI factors fall short by not including all costs that are necessary in the provisioning of service. They not only omit relevant costs but are, in addition, too restrictive because they assume that all LECs' cost structures are equivalent. The Hatfield/MCI capital cost factors are based in part, as follows:

ROI: 9.5%
Debt/Eq.: 45/55
Cost of Eq.: 11.0%
Service Life: 18 years

In order to determine relevant costs of service, the Model simply should not make assumptions that all cost structures are the same; each LEC certainly is structured differently. Additionally, a specific value of 18 years for an average service life simply does not take into account, first, the variance in lives for certain types of plant nor, second, the fact that lives are continually getting shorter and are certainly shorter than 18 year, "on average". As with the ARMIS data, such strict definitions on cost levels will disadvantage individual LECs with different cost structures.

If the purpose of the BCM is to determine high cost support required <u>in dollars</u>, then both sets of factors fall short of that purpose. Not only do the ARMIS factors attempt to present strictly a forward-looking depiction of cost of service, but they also disadvantage LECs with different cost levels than those assumed by ARMIS. The Hatfield / MCI factors are even more restrictive and leave out pertinent cost accounts. To assume that a relevant level is somewhere between the two, as an upper and lower bounds, as the BCM does, attempts to give credence that both are valid estimates when LEC embedded costs are, in fact, the more appropriate cost basis for making "high-cost" calculations. At a minimum, the Benchmark Cost Model factors fail to take into account shared and common costs incurred by carriers of last resort, major cost categories that must be included in determining "high-cost" areas.

III. GEOGRAPHICAL ASSUMPTIONS OF THE BENCHMARK COST MODEL

The Census Block Group:

The Census Block Group concept, on the surface, appears to be an innovative and accurate approach to determine groupings for the purposes of estimating wire center layouts and homogenous cost areas. Although perhaps innovative, the CBG concept is certainly not accurate. The CBG approach does not accurately depict the layout of wire centers for the LEC. In many cases the BCM will most likely assign CBGs, or portions thereof, to a different wire center than from where they are actually served. In other words households are assigned to the wrong wire center. This being the case, the resulting cable facility calculations become invalid.

In essence, the use of the CBG approach by the Model assumes that LECs operate and plan their wire centers on a "scorched earth" basis. If the Model is to realistically determine accurate service costs, and especially "high-cost" areas, a model must represent a more realistic perspective. LECs develop efficient wire center plans based on forecasts but they must also take into account the simple fact that historical (and efficient) planning has placed those wire centers where they are. It would not be feasible for a LEC to uproot a central office or reroute cables simply because of changes in demographics, i.e., CBGs. The plant assumptions created by the CBG approach do not accurately reflect the LEC wire center layout nor the associated costs. Although the Model attempts to calculate costs "assuming efficient engineering and design criterion" it does not calculate the real cost of an LEC nor take into account the fact that LECs have made efficient engineering decisions in the past that must fit into today's new efficient planning.

The inaccuracy described above is further exacerbated by several additional geographical assumptions relating to cable placements. First of all, the Benchmark Cost Model assumes that feeder cables end at the edge of a square CBG. It also assumes that these are only four main feeder and four main distribution routes that are all at right angles to one another, with sub-feeder routes at right angles to the main feeder routes. All of these assumptions are extremely, and unrealistically simplistic and do not take into account varying topologies nor the fact that, in many cases, there will be more than four main routes necessary. And, since the CBGs could be easily mis-assigned to wire centers, the resulting cable routes are inaccurately estimated.

The whole CBG approach is overly simplistic as described above, and the result is an inaccurate depiction of the plant layout and the associated costs for a particular LEC.

IV. TECHNICAL ASSUMPTIONS OF THE BCM

A. Loop Technology Assumptions

The BCM makes a number of assumptions with regards to loop plant that are simply not valid, resulting in potential miscalculations of cost. The first invalid assumption is that analog copper technology is placed for feeder routes less than 12,000 feet. This simply does not reflect the many situations where this is not the case. Evidently the BCM assumes that 12,000 feet is some recognized industry average; this is not valid.

The second invalid assumption relates to digital subscriber line carrier systems. The assumption used by the BCM is that the technology used is the SLC Series 2000, and it is placed for loop lengths beyond 12,000 feet. As just described, this distance assumption is not valid. In addition, not all LECs, perhaps few, regard the SLC Series 2000 as the technology of choice. The same holds true for Digital Fiber Loop Carrier Bus Technology.

B. Switch Technology Assumptions

The BCM makes the assumption that the DMS 100 would be the only forward- looking technology used for all LECs. In addition, the cost structures, common and per line, are developed by the BCM based on that assumption. Singling out the DMS-100 is far from being a valid assumption. There are other technologies available that would represent forward-looking switch technologies for LECs. They could include but are not limited to AT&T 5ESS, Ericsson AXE, among others. Many companies use a mix of these types, although many LECs could use one specific type such as the AT&T 5ESS. The common and per line cost structures and dollar amounts are vastly different depending on which type is used. Therefore, simply using a DMS-100 switch for determining the costs for all LECs will not provide an accurate cost picture at all. Furthermore, to determine "high cost" areas, the Model would have to recognize areas where it is simply not cost effective to replace a switch with one of these switch types, and therefore, the older technology should be considered as the cost basis.

V. BCM INVESTMENTS CALCULATIONS

A. Lack of Pertinent Information

It is not readily apparent that the BCM has included all plant associated with loops. For example, there is no reference to the costs associated

with Serving Area Interfaces (SAI), terminals, or drops that feed households. Furthermore, even if SAI costs were included, the quantity of SAIs would need to be equivalent to the number of distribution areas in the wire center. This is not depicted in the BCM since it utilizes the CBG concept which would seldom be representative of distribution areas.

B. Loop Fill Factors Annual by BCM

In order to obtain an accurate calculation of loop investment, fill factors are used to take into account current under-utilization for planned growth of those facilities. The BCM provides a table of fill factors by density for both feeder and distribution. These fills are overly simplistic and are not appropriate for the purposes of determining the cost of loop plant for an individual LEC. The fill associated with loop plant will vary from LEC to LEC and will depend upon current obligations to serve their individual areas as well as past "build-ups to meet past obligations to serve. Such fill factors, in order to be accurate, would need to be provided for each LEC based on the specific circumstances for those LECs.

C. Switching Costs and Circuit Equipment Costs

To determine the switching investments, the BCM makes calculations that are inaccurate. First of all, as previously described, the Model assumes the structure and level of cost associated with the DMS 100 switch type, excluding the numerous other switch types that will be used by LECs. The cost structures and vendor prices can be vastly different between these switch types. In addition, the Model takes the "common" investment for the switch is multiplied by a "Basic Local Service Factor" which apparently allocates 79% of these common costs to basic service. There appears to be no basis for this allocation factor and it will lead to inaccurate calculations for individual LECs: i.e., this factor could be vastly different for each LEC.

Other factors include a land and building factor and a "total lines to residential lines" factor. Both of these factors, used to calculate the investment per line, can vary enormously by LEC. The Land and Building Factor, specifically 1.043, assumes that 4.3% of the value of the switching equipment would represent that additions required for land and building to provide that central office switching. Such a value certainly does not recognize that LECs would have building assets in existence due to past, and efficient, planning for obligations to serve. If the Model is to calculate service costs it must take into account a more realistic value.